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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/902,340	07/10/2001	Lih-Hsin Chou	CU-2592 RJS	8900
7590 01/05/2004			EXAMINER	
Ladas & Parry Suite 1200 224 South Michigan Avenue Chicago, IL 60604			ANGEBRANDT, MARTIN J	
			ART UNIT	PAPER NUMBER
			1756	

DATE MAILED: 01/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/902,340	CHOU ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Martin J Angebrannndt	1756	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) ☒ Responsive to communication(s) filed on 21 October 2003.

2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4) ☒ Claim(s) 1,4,6,7 and 9 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.

6) ☒ Claim(s) 1,4,6,7 and 9 is/are rejected.

7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.

8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☐ All   b) ☐ Some \* c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.

2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.

3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____.
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.	6) <input type="checkbox"/> Other: _____.

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1. The response provided by the applicant has been read and given careful consideration.

The examiner's response to the arguments of the applicant is presented after the first rejection to which they are directed. Rejections of the previous office action, not repeated below are withdrawn due to the amendments and arguments of the applicant.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1,4,6 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takakubo et al. JP 01-169749.

Takakubo et al. JP 01-169749 teaches amorphous carbon hydrogen films as the recording layer using plasma CVD under the conditions of 30 mTorr and 100 W RF power. The thickness may be 300-900 nm (page 2/upper right column) and may be formed on glass of inexpensive organic resin substrates ((page 2, lower left column). The heating of the film to 600 or 800 degrees which are each temperatures greater than 300 degrees is discussed in the body the text and in the abstract.

It would have been obvious to one skilled in the art to form the recording layer of Takakubo et al. JP 01-169749 within the 300-600 nm thickness range on an inexpensive organic resin substrate based upon the disclosed to do so.

The applicant argues that the hardness of the a-Carbon films does not allow to the formation of holes in the recording layer. The applicant asserts that this prevents formation of recessing in the recording film or the substrate due to hydrogen evolution. This is true for the

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recording layer and the claim makes no mention of the formation of recesses in the recording layer, but the hydrogen gas evolved, must go somewhere and if prevented from passing through the topside of the recording layer must exit toward the substrate. This would be cause hydrogen bubbles to form at the interface of the recording layer and substrate, thereby meeting the limitations of the claims.

4. Claims 1,4,6,7 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takakubo et al. JP 01-169749, in view of Ohkawa et al. '635

In addition to the basis provided above, the examiner holds that it would have been obvious to use old and well known polymeric substrates, such as the polycarbonate, polymethyl methacrylate (an acrylic resin), polyolefin, or epoxy resins disclosed by Ohkawa et al. '635 as the plastic substrate materials in the optical recording media of Takakubo et al. JP 01-169749.

The rejection stands for the reasons provided above without further comment as no further arguments were directed at this rejection.

**5 THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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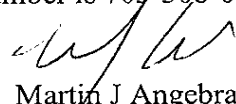
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however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Martin J Angebranndt whose telephone number is 571-272-1378. The examiner can normally be reached on Monday-Thursday and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Huff can be reached on 571-272-1385. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9309 for regular communications and 703-872-9309 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.



Martin J Angebranndt  
Primary Examiner  
Art Unit 1756

December 18, 2003